CALS Around the World
How Dr. John Koprowski trains the conservationists of tomorrow (page 6)

New This Fall
CALS Launches a Cutting Edge Food Safety Degree Program (page 8)

New College of Veterinary Medicine Moves Forward
Building has begun! (page 10)
I have been asking myself this question – how many of our 28,000 college alumni do I really know? Do we at the College know what you are doing now, or have we lost touch? Have you stayed connected to your college friends? Have you returned to campus in the last few years...or ever? Do you know about the exciting things happening here at your alma mater?

I would love to come meet every one of you personally and fill you in on how your college has changed and how we are affecting the world like never before. We will be hosting alumni gatherings throughout the Southwest this fall. Our sole purpose is to meet you and share the important research that CALS is doing - research that is shaping your own community. We also want to give you the chance to meet other alumni in your area.

Our goal is to reach as many College of Agriculture and Life Sciences alumni as we can. Be on the lookout for an event near you.

Another way you can connect is to come back to campus for Homecoming. For many years, we have hosted the “Almost World Famous” Dean's Burrito Breakfast at the Student Union. This year, we will be holding the Homecoming Breakfast in the lobby and courtyard of the Forbes Building, back where it all began. With vision from people like you, we've transformed the Forbes lobby to better support our students and reflect our cutting-edge work. We want you to see it. You won’t believe the change!

Our World Famous Homecoming Breakfast is a great place to visit with your favorite (possibly retired) professors and fellow alumni. Maybe you were a CALS Ambassador or a student club member. Come and reconnect with people you haven’t seen in years and meet new people.

I hope to see you there!

If you are interested in participating in a regional event, or have questions about Homecoming, please contact the Development, Alumni, Advocacy & Corporate Relations office at alumni@cals.arizona.edu or 520 262-3013.

A Message From Dean Shane Burgess

“You won’t believe the change!”

Watch for These Upcoming Events!

• Regional Alumni Gatherings
• Homecoming Celebration
The Campus Cactus Garden serving as a source of beauty, inspiration and sustainable science for centuries to come. A graduate student dedicated to conserving our earth’s most endangered animals. A pest management expert who helps farmers preserve their livelihood against emerging threats and protects our natural resources.

All of these dreams, and many more, have been made possible through estate gifts, given by donors who wished to have a positive impact beyond their lifetimes. But with more than half of all Americans lacking a solid estate plan, there is a good chance you haven’t yet formalized what will happen to your assets when you are gone. What will go to your family, your friends and the organizations you care about? Without an estate plan this task falls to the state, which may not act in accordance with your wishes.

A well prepared estate plan can provide peace of mind for you and your family. It can also have a lasting impact in the College of Agriculture and Life Sciences.

Each year, thousands of people designate a portion of their assets for the benefit and support of institutions like the University of Arizona College of Agriculture and Life Sciences. Your gift can be tailored to meet your specific objectives like supporting cutting-edge research or providing student scholarships.

“It was an easy decision to make a bequest to the UA as I reflected on my life and what’s brought me the most joy and fulfillment,” says Dr. Beverly “Bam” Mitchell, (BS ’67, M. Ed ’68). “My life and experiences at the UA created the fondest memories and laid the foundation for who and what I am today.”

Planned gifts can be made in many different ways. You could designate a specific dollar amount, a particular asset, or a percentage of your estate. The UA also accepts gifts of farms and other real estate in the right circumstances.

To learn more about wills and ways you can take care of your family and also support CALS, contact Krystal Alonis at krystala@email.arizona.edu or (520) 626-0047.
A host of Angels descended on Pima County Cooperative Extension on February 28th to congratulate the Tucson Village Farm (TVF) team on being selected as the 2018 Angel Charity Beneficiary. The $445,000 grant award will support the construction of The Angel Charity Culinary Education Center for Children to be built on site at Tucson Village Farm. Through this certified teaching kitchen and education space more than 13,000 children annually will learn how to prepare healthy meals from fresh food and receive the education and framework they need to create brighter, healthier futures for themselves, their families, and their communities.

The announcement followed a lengthy and highly competitive application process. “Their presentation knocked it out of the ballpark,” said Carla Keegan, Angel Charity 2018 General Chair. “The number of schools they serve that come and do field trips, and the number of children impacted—and their grant application was outstanding,” Keegan added.

The Tucson Village Farm reconnects young people to a healthy food system, teaches them how to grow and prepare fresh food, and empowers them to make healthy life choices. In 2017 alone, TVF delivered educational programs to 12,913 young people and provided 44,450 hours of community education.
Located in the foothills of the Old Pueblo, Tucson Village Farm is a peaceful urban enclave of vegetable gardens, clucking chickens and genuine joy for the thousands of school children who come here each year to participate in University of Arizona farm-to-table educational programming.

It’s also the place that saved the life of Jason Isles. A 19-year-old cancer survivor, Jason was living on his own and staying on the couches of caring friends when he picked the Farm for a school-sponsored volunteer day 1 ½ years ago.

“Today I am healthy and I have a job – and it’s literally all because of the farm,” Jason said. “It sounds cheesy saying it, but it’s the truth.”

Jason said he was struggling in many ways when he landed at the farm and his diet, which consisted of non-perishable commodities given to him by another community agency, was not ideal for his health. “I told them about the situation I was in and, without hesitation, they gave me bags of food to come home with,” Jason said. They taught him how to cook it too.

Jason loved his first volunteer day so much that he came back week after week to help. He loved working with farm manager, Alex Atkin, faculty member, Liz Sparks and program coordinator, Leza Carter.

The Farm’s positive influence served as the catalyst for many other life improvements for Jason. Thankfully today Jason has good health, an apartment of his own and – perhaps the best part – an AmeriCorps job on the Farm!

“These people are so great. You can tell they care about you from the moment you meet them,” he said. “I had no idea that there was a place like this in Tucson,” he added. “If I did, I would have been here since I was a little kid.”

If you are interested in underwriting scholarships for youth like Jason, please visit cals.arizona.edu or call (520) 626-2013.

“Today I am healthy and I have a job - and it’s literally all because of the farm”
- Jason Isles
What do critically endangered river dolphins in Nepal, rhinos in South Africa and tiny red squirrels living atop Mt. Graham in Arizona all have in common? Supported by a talented team of graduate students from the School of Natural Resources and the Environment, Dr. John Koprowski is working to save these animals and protect the larger ecosystems they support.

“If we’re going to have an impact in perpetuity, we have to provide training for the conservationists of tomorrow, and that’s why I am at the University,” said Dr. Koprowski.

Guided by this belief, Dr. Koprowski has spent the last 17 years teaching courses in wildlife conservation and mentoring graduate students who also wish to work with animal species that are at the greatest risk.

Their projects include work with Andean bears in Colombia, vaquita porpoises in Mexico’s Sea of Cortez, elephants in South Africa and mammals of the Tibetan Plateau and associated mountains in China. They begin by studying individual animals, and then look at the animals' habitats and larger ecosystems. They work to see what environmental factors are contributing to the species’ decline and try to address those problems so the species has the best possible chance of survival.

They also work with vulnerable small animals, including squirrels, who play an often-undervalued but hugely important role on their ecosystems. Dr. Koprowski is known as the world’s leading squirrel expert and he and his students have helped imperiled squirrels in Asia, South America, North America and Europe.

One of these places is right in the University of Arizona’s backyard, at the top of Mt. Graham about 100 miles from campus. There, a colony of small red squirrels has survived since the last ice age and their current plight speaks to the effects of climate change.

In the summer of 2017, a large forest fire raged on Mt. Graham and when it was over there were few trees left. Without their protective tree cover, the red squirrels have been especially vulnerable to predators, and their population has decreased from ~300 to just ~35.
Like any endangered species, the squirrels’ complete removal from the ecosystem would impact other animals such as prey animals who rely on the squirrels’ dens for shelter or predators who count the squirrel as an important food source. In the face of this, Dr. Koprowski and his students are working overtime to help the critically endangered species survive, experimenting with tactics like captive breeding and habitat creation.

“Extinction of a species is a permanent loss that has cascading impacts on other components of the ecosystem,” Dr. Koprowski said, adding that red squirrels enhance forest quality as they move, planting seeds and inoculating soil with fungi critical to root function and forest quality.

“Avoiding loss of a species, especially if caused by humans, is a necessary emphasis of conservation efforts,” he added. “My team tries to respond where we are needed the most.”

Between 200 to 300 aspiring PhD students request to join Dr. Koprowski’s conservation team each year and current fellowship resources permit only a very small number to come aboard. If you are interested in investing in the training of the conservationists of tomorrow, please visit cals.arizona.edu, or call (520) 626-2013.

A fine ‘Fellow’ indeed!
This winter, Dr. John Koprowski was named a Fellow by the American Association for the Advancement of Science (AAAS). The AAAS Fellow tradition dates to 1874, and Dr. Koprowski joins the ranks of an illustrious group of scientists. He shares the Fellow honor with Thomas Edison, who was elected Fellow in 1878; anthropologist Margaret Mead, who was elected Fellow in 1934, and American biologist James Watson, a pioneering DNA researcher who was elected fellow in 1965. (Source: AAAS)
Imagine: You are just returning home from a dinner date. What started in the driveway as a concerning stomach gurgle soon turns into twisting pain that keeps you up that night.

By the next morning, you’re back to normal, but you aren’t alone: one in every six Americans gets sick from contaminated food or beverages each year according to estimates from the Centers for Disease Control and Prevention!

With the USDA estimating that 3,000 people die every year from food-borne illnesses that cost nearly $15.6 billion annually, food safety breaches can be catastrophic for families, communities, and producers. Thankfully, our new Food Safety Undergraduate Degree Program will prepare a new generation of students to protect producers and the consumers they serve.

Housed in our School of Animal and Comparative Biomedical Sciences (ACBS), this program is interdisciplinary, cutting-edge and broad-based. It will include courses and faculty from ACBS, the Mel and Enid Zuckerman College of Public Health, and four other areas within the College of Agriculture and Life Sciences. These include the Department of Nutritional Sciences, the Department of Soil, Water and Environmental Science, the School of Plant Science and the Department of Entomology.

In addition to the UA’s general coursework, students will take 10 core courses to develop an all-around perspective in food safety, epidemiology, food toxicology and the legalities in the food industry. Students will also be able to specialize in areas like...
produce, animal production, public health, food science and microbiology. Students will have access to producers, and our proximity to the U.S./Mexico border will offer unparalleled opportunities to learn about the cross-border regulations stipulated in the Food Safety Modernization Act. And to address the unique needs of Yuma-area producers, a distance-learning option will also be offered.

Being able to hire someone with this training will be a welcome change for many producers, who have had to adapt in real-time, while on the job, to changing food safety laws and needs. As the regional academic coordinator for University of Arizona in Yuma and La Paz counties in Arizona and Imperial County in California, Tanya Hodges has seen producers grapple with these challenges.

“What many don't realize,” Hodges said, “is that most jobs involved in food safety require advanced and very specific science and math competencies that can only be gained through very specific coursework.”

“One in every six Americans gets sick from contaminated food or beverages each year.” CDC.gov

CALS Alumnus Kami Weddle, received her degree in microbiology with a minor in chemistry. She said she uses that scientific foundation every day in her job as Director of Food Safety and Quality for Rousseau Farming Company, which farms 9,500 acres in the Phoenix metro area. But, like most people in her position today, Weddle learned how to be effective on the job and by taking ad hoc training courses offered through the government industry organizations. Weddle is hopeful this program will help produce pre-qualified, in-state applicants for food safety jobs.

“As an industry we’ve tried to be really strong, because food safety is not a competitive advantage, it is something that every company needs to have in order to produce a safe product,” Weddle said. “If one grower has an issue, we are all going to have a problem.”

For example, Weddle added, if one producer has a safety problem with romaine, consumers aren’t going to stop eating only that producer’s lettuce, they are going to stop eating lettuce entirely - that means financial ramifications for all growers, packers and restaurant owners.

After having built her employer’s strong Food Safety and Quality program from scratch, Weddle said she can see the benefits of this program, in which students will have a structured and intentional experience.

“It’s wonderful,” she said. “I wish I would have had a program like this.”

Learn more about our new Food Safety Degree Program at https://foodsafety.arizona.edu
Cutting-Edge Education in Less Time at Lower Cost

The new College of Veterinary Medicine (CVM) is moving full steam ahead! Our focus is on making cutting-edge veterinary medical education more affordable and accessible to Arizona’s citizens. In addition to educating veterinarians, the program will collaborate with existing UA academic and research programs in the health sciences and agriculture to improve animal and public health throughout the state.

Because Arizonans who graduate from the College of Veterinary Medicine are more likely to remain in Arizona – close to family and friends – the program will help address critical veterinarian shortages in underserved communities and segments of the veterinary profession which will, in turn, make Arizona more attractive to animal production, retail, biomedical and bioscience companies.

The College of Veterinary Medicine is designed to provide each student with a range of clinical experiences in university, public and private settings. Through a hybrid approach to clinical rotations, students will receive training in their clinical year alongside practicing veterinarians in every sector of animal health. UA students will graduate in 3 years with an in-depth, year-round curriculum and enter the work force a year earlier. Many will also enjoy lower in-state tuition.

We plan to welcome our first class of 100 students in August of 2020. We have commenced building and improving facilities with a foundational gift of $9 million from the Kemper and Ethel Marley Foundation, alongside $8 million provided by the Arizona state legislature to build our new headquarters in Oro Valley. Several facilities will be upgraded for teaching purposes including Al-Marah Ranch in Tucson, the Campbell Avenue Farm and various rural locations around the state of Arizona.

How You Can Help

To learn more or help support the College of Veterinary Medicine, contact:
Marianne Capp Hadden, Director of Development
Ph: 520-621-3714   mariannehadden@email.arizona.edu

The University of Arizona has appointed David Besselsen, DVM, Ph.D., as interim dean of the UA’s College of Veterinary Medicine.

“I am excited to lead the University of Arizona into the future of veterinary medicine. Together we have an amazing opportunity to transform how we prepare the veterinarians and provide Arizona students with a realistic path into a veterinary career.”

Besselsen graduated from the University of Missouri-Columbia veterinary school in 1988, joined the UA in 1995 as chief of pathology services for University Animal Care (UAC). He became University Attending Veterinarian and UAC Director in 2011 and has been instrumental in developing UA’s veterinary program from the outset.

The University of Arizona is also working closely with Scottsdale resident, Mark Cushing, and his Animal Policy Group, to develop UA’s program to earn the accreditation necessary to launch in 2020. Mark has worked with a number of universities inside and outside of the United States to develop and maintain successful veterinary colleges.
First William A. Hanacek Endowed Memorial Scholarship in Plant Sciences Awarded

The College of Agriculture and Life Sciences is pleased to announce Elizabeth Bowman, a plant pathology graduate student in the School of Plant Sciences, as the first recipient of the William A. Hanacek Endowed Memorial Scholarship in Plant Sciences.

The scholarship is named for William August Hanacek, who was born in Cleveland, Ohio in 1942 and who, after serving in the military, attended the University of Arizona part-time while working for Burr-Brown, a technology corporation located in Tucson, Arizona. While at the UA, he earned a Bachelor of Science degree in soil chemistry and a Master of Science degree in plant protection.

After graduation, Bill worked as a greenhouse manager for many Salinas agricultural operations including Tanamura & Antle. “Bill was one of the first University of Arizona graduates to join the Bud Antle Company. He came on board just as we had begun integrating the use of transplants into our operations,” said Rick Antle, president and CEO of Tanimura & Antle. “Bill’s keen analytical skills and depth of knowledge that he brought to us from U of A was key to our success.” It was using these skills that Bill also co-authored five patents for horticultural devices and materials.

Bill lived an interesting and fulfilling life on his own terms and died of cancer on June 7, 2016. In August 2016, Bill’s only sibling, his sister Carol Hanacek Schroeder, visited the UA campus to fulfill Bill’s final request: to endow a scholarship for students who have had both experience as a military veteran and a strong desire to work with plants and agriculture. With $250,000 that Bill left in Carol’s care, the William A. Hanacek Endowed Memorial Scholarship in Plant Sciences was established. To make Bill’s legacy a family tradition, Carol also plans to create an endowed scholarship with a bequest from her own estate.

Bowman more than qualifies for the Hanacek Scholarship. She is a military veteran with six years in the Navy and she completed her master’s degree in plant pathology in 2016 and immediately began her Ph.D. studies. The $13,000 from the scholarship provides critical support to her work.

“Liz is an example of the best kind of graduate student,” said Michelle McMahon, co-director of graduate studies in the School of Plant Sciences and director of the UA Herbarium. “Organized and professional, she has a published journal article and mentors undergraduate and high school students with a large variety of activities in the lab. She is dedicated to reaching out to the community, has an ambitious plan for her research and we’re confident she can do it well.”

Through the memorial scholarship, Elizabeth’s research will extend Bill’s legacy. “He worked in plant protection,” McMahon said, “and she is increasing our understanding of the role microbes play in plant protection and plant health.”
New Scholarship Supports Agriculture in Arizona

What do a student who loves entomology, a student in the last year of school who wants to work in research at the USDA and a student interested in learning the art and the science of soil research all have in common? They are the most recent recipients of the Hicks Family Endowed Scholarship.

H. Grady Hicks is a proud 1990 alumnus of CALS, with a BS degree in Agriculture Economics who has a passion for promoting agriculture in Arizona. With this purpose as the driving force, Grady and his sister, Jennifer, who is also an alumnus from the UA, established this generous endowment to financially assist CALS agriculture students who will ultimately impact the future of agriculture in Arizona.

Grady and Jennifer understand the importance of agriculture on a personal level. Their father, Jim, started Jim Hicks and Company in Brea, California in 1982 with one employee and very little money. The business has consistently grown over the years and currently sells several hundred thousand tons of fertilizer each year within a multi-state area. Thank you to the Hicks Family for giving back to the University of Arizona!